MADISON ENERGY ADVISORY COMMITTEE TOWN OF MADISON Aug 20, 2015 MINUTES

Note: These minutes from the Aug 20, 2015 Madison Energy Advisory Committee meeting were approved at the September 23, 2015 Committee meeting.

Members Present: Selectman Bob King, Noreen Downs (Vice Chairman & Planning Board), Bill Lord (Secretary & Budget Committee), Russ Lanoie (Voter), Bruce Kennedy (Library Rep), and Russ Dowd (Voter). Absent: Nicole Nordlund (Voter). The meeting was held at the Town Hall.

Others Present: Madison TV Videographer Carol Dandeneau, Emily Benson (MWV Citizens for Energy Efficient Communities), Russell Hunt (Eversource), and Rick DeMark (NE Wood Energy Council).

Meeting Posted: At Madison & Silver Lake Post Offices and Town Hall upper and lower bulletin boards.

Meeting Called to Order: By Vice Chairman Noreen Downs at 7:00 p.m., with special rememberances and thoughts from the Committee for Mr. Ray O'Brien and his family. Ray's passion and energy for this work will be continued, as one of his many legacies, to the Town of Madison.

APPROVAL OF MINUTES – The minutes of the July 2015 meeting were approved; with a **motion** for approval by Dowd, seconded by Lanoie and unanimously voted 6-0.

PUBLIC COMMENTS - there were no public comments.

NEW BUSINESS:

WELCOME TO NEW SELECTMAN – Vice Chairman Downs welcomed new Selectman Bob King to the committee and expressed our gratitude for his involvement and support. Selectman King will replace Selectman Arruda as the selectman's rep to the Energy Committee.

EVERSOURCE PRESENTATION – Mr. Russell Hunt gave an excellent presentation with many recommendations for energy improvements, after his review and evaluation of the Town energy audit. Those recommendations are attached to these minutes. His analysis covers each of the town buildings. The development of an Energy Master Plan, with goals (e.g., conservation, reduced operations and maintenance costs, carbon footprint, etc.), an energy CIP, budgeting actions, community education, and energy champions are essential elements of a comprehensive program for Madison. Additionally, he covered the areas where Eversource could assist in funding new initiatives. Ideas like temp setbacks, LED light replacements, Smart Start program, were all included in the Eversource presentation.

NEW ENGLAND WOOD ENERGY COUNCIL PRESENTATION – Mr. Rick DeMark provided an extensive presentation of the NE Wood Energy Council efforts which can be applied to assist the Town in wood chip/pellet system installations. His slides are available on the website NEwoodenergycouncil.org. The engineering and planning for wood energy systems can be paid for completely by grants, through an application to the NE Wood Energy Council. The primary goal is heat from wood burning – either chips or pellets. Financial assistance is available through T-RECs. There are over 80 systems currently operating in NH.

ITEMS TO CAPTURE FOR POSSIBLE FUTURE TOWN COMMITTEE BRIEFING – energy

CIP, audit actions, replacement equipment timelines, tax assessment rules, building codes, energy master plan, Eversource recommendations (lights), Wood Council assessment (heat), Smart Start financing, radiant systems in garages/fire station, in-efficient off-self systems, town goals.

FUTURE ITEMS FOR DISCUSSION – Suggestions for discussion at the next meeting: additional committee member, chairman position, next steps for the committee, and schedule of presentations.

REVIEW OF ACTION ITEMS:

- 1. Russ Lanoie will re-contact Resilient Building Group (Dana Nute)/Jordan Institute to review the Town's previous energy audit of town buildings and confirm his presentation at the next meeting.
- 2. Russ Lanoie will research the enabling legislation at the local level to ensure home energy improvements do not cause increases (e.g., dis-insentivize) in local tax assessments.
- 3. Nicole Nordlund will review the Selectman's meeting minutes to see what their feedback was regarding the Eversource application.
- 4. Noreen Downs will provide energy consumption data, town and school kw/hr costs (minus demand and service charges) to Kim Frase for his development of a rough estimate for solar installation(s).

ADJOURN: 9:00 p.m. Lord made a **motion** to adjourn, seconded by Kennedy, and so voted unanimously 6-0.

NEXT MEETING – The next meeting will be Wednesday, Sept 23, 2015 at 7:00 PM at the Town Hall.

Respectfully submitted,

Wit. Lord

Bill Lord, Member Recording Secretary

1. Develop an Energy Master Plan

a. Goals

- X% Energy savings over X years
- ii. Carbon reduction X% Savings over X years
- iii. X% dollars saved over X years
- b. Process
 - i. Establish Team Roles
 - ii. Include Town Manager as Team Member
 - iii. Budget

c. Project Identification

- i. Develop Characteristics of "Good" Project
 - 1. Replace failed or failing equipment
 - 2. All New Construction Projects
 - 3. Replaced costly to maintain equipment
 - 4. Establish minimum ROI thresholds

d. Project Development

- i. Proposals
- Utility Incentives
- iii. Review
- e. Project Execution
 - Utility Incentives

f. Project Completion

- i. Verify savings
- ii. Post Project review
- iii. Share findings

g. Develop Energy Policy

- i. Energy purchasing best practices
- ii. Housekeeping guidelines
 - 1. Heating and Cooling Set-points (1 person)
 - 2. Zoning heating system
 - 3. Hot water heating set-points
 - Occupancy
 - 5. Lighting use
 - 6. Plug Loads
 - 7. Compressed air use
 - 8. Maintenance

iii. Education

2. My review of identified projects

a. Library

- i. Use programmable t-stats. No Eversource Incentive (already purchased)
- ii. Install Boiler Reset: Eversource Incentive is \$225 per reset
- iii. Exterior LED Upgrade: Eversource incentive potential 50%
- iv. No ERV (12 year pay back)
- v. Don't replace boiler unless end of life (est. 2019)
- vi. No Solar Hot water (20 year pay back)
- vii. Recommend Air sealing (no incentive)
- viii. Install Hot water heater timer (no incentive)
- ix. Roof PV Potential (8 to 10 year pay back with PUC incentives)

b. Fire Station

- i. No mixing air box (14 year pay back)
- ii. No heat recovery unit (14 year pay back)
- iii. Repair ceiling holes
- iv. Recommend Lighting upgrade: Eversource incentive potential 50%
- v. How are new t-stats being used?
- vi. Repair weather strip (always)
- vii. Compressed air system?

c. Highway Garage

- i. Upgrade Lighting: Eversource incentive potential 50%
- ii. Install wi-fi t-stats: Eversource incentive \$100 ea
- iii. Repair dropped wall insulation: No incentive
- iv. Toss bean cooker
- v. Compressed air system?
- vi. IR heater for garage?

d. Madison Garage

- i. Upgrade Lighting: Eversource incentive potential 50%
- ii. Install wi-fi t-stat: Eversource incentive \$100 ea
- iii. Install water heater timer: No incentive
- iv. Do no insulate wall beam for energy savings purposes
- v. Repair weather stripping
- vi. Waste oil furnace Potentially a good project

e. Madison Historical Building

- i. What are the OCC hrs?
- ii. No Incandescent bulbs!

f. Town Hall

- i. Seal bell tower stairwell
- ii. Install wi-fi t stats and properly zone: Eversource Incentive \$100 ea
- iii. Install solar blinds: Maybe, 10 year payback no incentives. Bundle with others
- iv. Air seal (always)
- v. Upgrade Lighting: Potential Eversource Incentive 50%
- vi. Don't install mix air box: 15 year pay back

- vii. Add boiler reset: Eversource incentive \$225
- viii. Don't install heat recovery unit: 13 year pay back
- ix. Repair weather stripping
- x. Install water heater timer
- g. Madison Elementary School
 - i. Don't do the following:
 - 1. Added Vesitbule shell upgrade
 - 2. Daylight lighting controls
 - 3. Heating System Upgrades
 - 4. Ventilation system upgrades

REMAINDER OF RAN "

 Resultant payback is 6 years or less with school aid and reduces C.U.I. from \$1.42/sf to \$1.15, as recommended by the Jordan Institute